

1644

1600

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/08/653,294C

DATE: 01/04/2002
 TIME: 14:57:23

Input Set : N:\EBONY'S\ES.txt
 Output Set: N:\CRF3\01042002\H653294C.raw

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JAN 16 2002

PS TECH CENTER 1600/2900

5 <110> APPLICANT: Stanford University
 7 Clayberger, Carol
 9 Krensky, Alan
 11 Buelow, Roland
 15 <120> TITLE OF INVENTION: IMMUNOMODULATING DIMERS
 19 <130> FILE REFERENCE: 28600-20200.23
 23 <140> CURRENT APPLICATION NUMBER: 08/653,294C
 25 <141> CURRENT FILING DATE: 1996-05-24
 29 <150> PRIOR APPLICATION NUMBER: US 08/222,851
 31 <151> PRIOR FILING DATE: 1994-04-05
 35 <150> PRIOR APPLICATION NUMBER: US 07/844,716
 37 <151> PRIOR FILING DATE: 1992-03-02
 41 <150> PRIOR APPLICATION NUMBER: US 07/755,584
 43 <151> PRIOR FILING DATE: 1991-09-03
 47 <150> PRIOR APPLICATION NUMBER: US 07/672,147
 49 <151> PRIOR FILING DATE: 1991-03-19
 53 <150> PRIOR APPLICATION NUMBER: US 07/561,246
 55 <151> PRIOR FILING DATE: 1990-07-30
 59 <150> PRIOR APPLICATION NUMBER: US 07/008,846
 61 <151> PRIOR FILING DATE: 1987-01-30
 65 <160> NUMBER OF SEQ ID NOS: 42
 69 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 73 <210> SEQ ID NO: 1
 75 <211> LENGTH: 10
 77 <212> TYPE: PRT
 79 <213> ORGANISM: Homo sapiens
 83 <220> FEATURE:
 85 <221> NAME/KEY: VARIANT
 87 <222> LOCATION: (1)...(10)
 89 <223> OTHER INFORMATION: Xaa at location 2 is E or V;
 91 Xaa at location 3 is D,S or N;
 93 Xaa at location 5 is R or G;
 95 Xaa at location 6 is I or N;
 97 <220> FEATURE:
 99 <223> OTHER INFORMATION: Xaa at location 7 is a hydrophobic or small amino acid
 101 Xaa at location 8 is R or L;
 103 Xaa at location 9 is G or R;
 105 Xaa at location 10 is a hydrophobic or small amino acid
 109 <400> SEQUENCE: 1
 111 Arg Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa
 113 1 5 10
 117 <210> SEQ ID NO: 2
 119 <211> LENGTH: 10
 121 <212> TYPE: PRT
 123 <213> ORGANISM: Homo sapiens
 127 <220> FEATURE:
 129 <221> NAME/KEY: VARIANT

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131 <222> LOCATION: (1)...(10)
133 <223> OTHER INFORMATION: Xaa at location 1 is a hydrophobic or small amino acid;
135 Xaa at location 2 is G or R;
137 Xaa at location 3 is R or L;
139 Xaa at location 4 is a hydrophobic or small amino acid;
141 <220> FEATURE:
143 <223> OTHER INFORMATION: Xaa at location 5 is I or N;
145 Xaa at location 6 is R or G;
147 Xaa at location 8 is D,S or N;
149 Xaa at location 9 is E or V
153 <400> SEQUENCE: 2
W-OK 155 Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Arg
157 1 5 10
161 <210> SEQ ID NO: 3
163 <211> LENGTH: 9
165 <212> TYPE: PRT
167 <213> ORGANISM: Homo sapiens
171 <220> FEATURE:
173 <221> NAME/KEY: VARIANT
175 <222> LOCATION: (1)...(9)
177 <223> OTHER INFORMATION: Xaa at location 3 is Any Amino Acid;
179 Xaa at location 6 is N or I; or any amino acid of at least five carbon atoms;
181 Xaa at location 7 is I or hydrophobic or small amino acid;
183 <220> FEATURE:
185 <223> OTHER INFORMATION: Xaa at location 8 R or any aliphatic amino acid of at least
five carbon atoms;
187 Xaa at location 9 is G or R or any aliphatic amino acid
191 <400> SEQUENCE: 3
W-OK 193 Arg Glu Xaa Leu Arg Xaa Xaa Xaa Xaa
195 1 5
199 <210> SEQ ID NO: 4
201 <211> LENGTH: 6
203 <212> TYPE: PRT
205 <213> ORGANISM: Homo sapiens
209 <400> SEQUENCE: 4
211 Arg Ile Ala Leu Arg Tyr
213 1 5
217 <210> SEQ ID NO: 5
219 <211> LENGTH: 6
221 <212> TYPE: PRT
223 <213> ORGANISM: Homo sapiens
225 <400> SEQUENCE: 5
227 Arg Ile Leu Leu Arg Tyr
229 1 5
233 <210> SEQ ID NO: 6
235 <211> LENGTH: 6
237 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
243 <400> SEQUENCE: 6
245 Tyr Arg Leu Leu Ile Arg

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Input Set : N:\EBONY'S\ES.txt
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247 1 5
251 <210> SEQ ID NO: 7
253 <211> LENGTH: 6
255 <212> TYPE: PRT
257 <213> ORGANISM: Homo sapiens
261 <400> SEQUENCE: 7
263 Tyr Arg Leu Ala Ile Arg
265 1 5
269 <210> SEQ ID NO: 8
271 <211> LENGTH: 10
273 <212> TYPE: PRT
275 <213> ORGANISM: Homo sapiens
279 <400> SEQUENCE: 8
281 Arg Glu Asn Leu Arg Ile Ala Leu Arg Tyr
283 1 5 10
287 <210> SEQ ID NO: 9
289 <211> LENGTH: 10
291 <212> TYPE: PRT
293 <213> ORGANISM: Homo sapiens
297 <400> SEQUENCE: 9
299 Tyr Arg Leu Ala Ile Arg Leu Asn Glu Arg
301 1 5 10
305 <210> SEQ ID NO: 10
307 <211> LENGTH: 10
309 <212> TYPE: PRT
311 <213> ORGANISM: Homo sapiens
315 <400> SEQUENCE: 10
317 Arg Glu Asn Leu Arg Ile Leu Leu Arg Tyr
319 1 5 10
323 <210> SEQ ID NO: 11
325 <211> LENGTH: 10
327 <212> TYPE: PRT
329 <213> ORGANISM: Homo sapiens
333 <400> SEQUENCE: 11
335 Tyr Arg Leu Leu Ile Arg Leu Asn Glu Arg
337 1 5 10
341 <210> SEQ ID NO: 12
343 <211> LENGTH: 10
345 <212> TYPE: PRT
347 <213> ORGANISM: Homo sapiens
351 <400> SEQUENCE: 12
353 Arg Glu Asp Leu Arg Ile Ala Leu Arg Tyr
355 1 5 10
359 <210> SEQ ID NO: 13
361 <211> LENGTH: 10
363 <212> TYPE: PRT
365 <213> ORGANISM: Homo sapiens
369 <400> SEQUENCE: 13
371 Tyr Arg Leu Ala Ile Arg Leu Asp Glu Arg

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Input Set : N:\EBONY'S\ES.txt

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373 1 5 10
377 <210> SEQ ID NO: 14
379 <211> LENGTH: 10
381 <212> TYPE: PRT
383 <213> ORGANISM: Homo sapiens
387 <400> SEQUENCE: 14
389 Arg Glu Asp Leu Arg Ile Leu Leu Arg Tyr
391 1 5 10
395 <210> SEQ ID NO: 15
397 <211> LENGTH: 10
399 <212> TYPE: PRT
401 <213> ORGANISM: Homo sapiens
405 <400> SEQUENCE: 15
407 Tyr Arg Leu Leu Ile Arg Leu Asp Glu Arg
409 1 5 10
413 <210> SEQ ID NO: 16
415 <211> LENGTH: 12
417 <212> TYPE: PRT
419 <213> ORGANISM: Homo sapiens
423 <400> SEQUENCE: 16
425 Tyr Arg Leu Leu Ile Arg Arg Ile Leu Leu Arg Tyr
427 1 5 10
431 <210> SEQ ID NO: 17
433 <211> LENGTH: 12
435 <212> TYPE: PRT
437 <213> ORGANISM: Homo sapiens
441 <400> SEQUENCE: 17
443 Tyr Arg Leu Leu Ile Arg Arg Ile Ala Leu Arg Tyr
445 1 5 10
449 <210> SEQ ID NO: 18
451 <211> LENGTH: 12
453 <212> TYPE: PRT
455 <213> ORGANISM: Homo sapiens
459 <400> SEQUENCE: 18
461 Tyr Arg Leu Ala Ile Arg Arg Ile Leu Leu Arg Tyr
463 1 5 10
467 <210> SEQ ID NO: 19
469 <211> LENGTH: 12
471 <212> TYPE: PRT
473 <213> ORGANISM: Homo sapiens
477 <220> FEATURE:
479 <221> NAME/KEY: VARIANT
481 <222> LOCATION: (1)...(12)
483 <223> OTHER INFORMATION: Xaa = D-Arginine
487 <400> SEQUENCE: 19
489 Tyr Arg Leu Ala Ile Xaa Arg Ile Ala Leu Arg Tyr
491 1 5 10
495 <210> SEQ ID NO: 20
497 <211> LENGTH: 14

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Input Set : N:\EBONY'S\ES.txt
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499 <212> TYPE: PRT
 501 <213> ORGANISM: Homo sapiens
 505 <220> FEATURE:
 507 <221> NAME/KEY: VARIANT
 509 <222> LOCATION: (1)...(14)
 511 <223> OTHER INFORMATION: Xaa = D-Isoleucin
 515 <400> SEQUENCE: 20
 WK> 517 Tyr Arg Leu Ala Ile Arg Ile Xaa Arg Ile Leu Leu Arg Tyr
 1 5 10
 523 <210> SEQ ID NO: 21
 525 <211> LENGTH: 15
 527 <212> TYPE: PRT
 529 <213> ORGANISM: Homo sapiens
 533 <400> SEQUENCE: 21
 535 Ala Tyr Arg Leu Leu Ile Lys Val Ile Arg Ile Val Leu Lys Tyr
 1 5 10 15
 541 <210> SEQ ID NO: 22
 543 <211> LENGTH: 17
 545 <212> TYPE: PRT
 547 <213> ORGANISM: Homo sapiens
 551 <400> SEQUENCE: 22
 553 Ser Tyr Lys Leu Val Ile Lys Ile Asn Asn Ile Arg Ile Val Val Lys
 1 5 10 15
 557 Phe
 563 <210> SEQ ID NO: 23
 565 <211> LENGTH: 10
 567 <212> TYPE: PRT
 569 <213> ORGANISM: Homo sapiens
 573 <400> SEQUENCE: 23
 575 Arg Glu Asp Leu Arg Thr Leu Leu Arg Tyr
 1 5 10
 581 <210> SEQ ID NO: 24
 583 <211> LENGTH: 10
 585 <212> TYPE: PRT
 587 <213> ORGANISM: Homo sapiens
 591 <400> SEQUENCE: 24
 593 Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr
 1 5 10
 599 <210> SEQ ID NO: 25
 601 <211> LENGTH: 10
 603 <212> TYPE: PRT
 605 <213> ORGANISM: Homo sapiens
 609 <400> SEQUENCE: 25
 611 Arg Glu Asn Leu Arg Thr Ala Leu Arg Tyr
 1 5 10
 617 <210> SEQ ID NO: 26
 619 <211> LENGTH: 20
 621 <212> TYPE: PRT
 623 <213> ORGANISM: Homo sapiens

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
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Input Set : N:\EBONY'S\ES.txt
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L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:935 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39